APPENDIX B. Response to Comments on Public Draft of the NMFS Strategic Plan for Fisheries Research

In August 2001, NMFS published a Notice of Availability in the *Federal Register* announcing the availability of the draft Strategic Plan for Fisheries Research. Comments were received from 11 organizations and individuals, representing a range of interests. The comments were helpful in revising the plan and preparing the final document. This appendix summarizes the comments and addresses each major comment. Some commenters also identified inconsistencies in the draft plan and suggested editorial or textual changes. These specific comments are not addressed here. However, the final plan document incorporated these suggestions as much as possible.

Comment: The Plan does not fully address stock assessment research. It lacks specificity with regard to the development of better models to estimate abundance, biomass, and mortality with limited data and does not adequately detail methods to collect better data.

Response: The NMFS Strategic Plan for Fisheries Research is designed to provide a common framework for research, not the specific details. The details are to be elaborated in other plans such as the soon-to-be-released NMFS Stock Assessment Improvement Plan.

Comment: The Plan should establish and outline research efforts to explore alternatives to an MSY-based management system for fisheries. Predictive management could be based on predator-prey relationships, oceanographic conditions, and ecosystem-based interactions, but not without supporting research.

Response: NMFS believes that the concept of maximum sustainable yield (MSY) is an integral component of the MSFCMA and that it is reasonable to retain as a key element of current fishery management programs. It is worth noting that NMFS does not consider MSY, or the fishing mortality rate that generates MSY, as a target for fisheries management. Rather, NMFS interprets MSY as an upper bound on optimum yield. This interpretation is shared by several intergovernmental and national fisheries organizations as a central feature of the precautionary approach to fisheries management. However, NMFS does agree with the need to expand fisheries management to an ecosystem-based approach and is working toward this end in several respects. The NMFS Strategic Plan for Fisheries Research cites two prestigious committee reports (EPAP, 1999; NRC, 1999a). The former contains recommendations for the development of fishery ecosystem plans—a document that would incorporate ecosystem principles, goals, and policies into current fisheries management structure. The agency has formed a work-

ing group that is evaluating the recommendations contained in these reports and will begin developing technical guidelines for their implementation in 2002.

Comment: The Plan should provide a regional mechanism for soliciting review of NMFS' research programs, with an emphasis placed on prioritizing, monitoring, and evaluating these programs and taking corrective action when shortfalls occur. It is also important for this Plan to outline how this mechanism would function and incorporate knowledgeable fishers into the peer review process.

Response: NMFS agrees that peer review is an important component of an effective science program. NMFS is in the process of formalizing its science guidelines and procedures through the development of its Science Quality Assurance program. This suggestion will be forwarded to the development team so it can be considered for incorporation into their plan.

Comment: For the SWFSC overview in Appendix A of this Plan, NMFS does not adequately address research efforts to conduct baseline assessments and map major habitats of the coral reef ecosystem in the western Pacific region, despite the fact that this region contains most of the U.S. coral reef areas. Additionally, the western Pacific region might serve as a "laboratory" to investigate the impacts of fishing on coral reefs, and in particular, research marine protected area impacts.

Response: NMFS agrees and has revised this section of the Plan to more accurately reflect current research activities and priorities on coral reefs and the research opportunities that MPAs provide in the western Pacific region.

Comment: For the SWFSC overview in Appendix A of this Plan, NMFS needs to expand on research efforts to evaluate the socio-economic impacts of recent management measures affecting fishing industries in the western Pacific region.

Response: NMFS agrees and has modified this section of the Plan to more fully represent socio-economic research efforts and priorities in the western Pacific region.

Comment: For the SEFSC overview in Appendix A of this Plan, NMFS needs to list observer programs as a priority for the Southeast region. Observer studies provide data that are not only critical to assessing bycatch, but are an important component of the information needed for reliable stock assessments.

Response: NMFS agrees and has revised this section and others in this Plan to recognize the important role observers play in providing data on species-composition of catch and bycatch, estimates of gear, vessel and gear characteristics, fishing locations, biological samples, and environmental parameters, all of which contribute to effective fisheries management.

Comment: The Plan should include a study to identify the small nucleus of anglers pursuing swordfish and gather their landing statistics, catch rates, and size distribution in order to acquire more accurate information on recreational landings by U.S. fishers for swordfish.

Response: NMFS is very interested in conducting surveys to estimate the landing of swordfish by recreational anglers. Identification of the anglers who fish for swordfish is a difficult task because such anglers are not required under any existing permit program to notify NMFS of their intent to fish for this species. Compilation of a list of the participants in the recreational swordfish fishery would be possible if those participants were required to provide such notification. NMFS is currently considering possible options for implementing such a requirement. Once NMFS obtains a comprehensive list of these anglers along with their telephone numbers and mailing addresses, it would certainly be possible to use that list to conduct efficient surveys that would accurately estimate their fishing effort, catch rates, and landings with respect to swordfish.

Comment: The Plan should include research regarding post-release mortality for billfish, sharks, and small swordfish caught on U.S. longlines.

Response: The NMFS Strategic Plan for Fisheries Research cites and supports research to implement the recommendations of the NMFS Bycatch Plan which includes research on post-release mortality of billfish, sharks, and small swordfish.